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THERE was never a period in the history of the metropolis when so many large building operations were either in process of construction or in contemplation as at the present time. Only a few years ago certain Jeremiahs predicted dire financial calamity for the investor who continued to pin his faith to sky-scrapers in the lower portion of the city, but notwithstanding the enormous increase in rentable office space provided by the operations of the last few years, investments in this line still continue with unabated vigor. This extraordinary activity is not confined alone

to the lower portion of the city, but also shows itself in the retail dry goods district and at Long Acre Square, where a number of large structures will soon be in process of construction, which will entirely change the character of that rather backward locality.

As a consequence of this extraordinary activity, architects have found it almost impossible to secure draughtsmen of any kind, and we would suggest to both the League and the New York Chapter of the Institute that they perform a distinct service to both the employer and employee in the profession by keeping at their headquarters a book in which draughtsmen could register their names, salary wanted and qualifications, and to which the employer could have access at all times. Some years ago the New York Chapter attempted to carry out this programme, but the half-hearted way in which the work was carried on, together with the lack of effort to make the work known to the draughtsmen, caused it to be of little value. For some years the most useful bureau of information was the New York Sketch Club, and one of the old members of that organization still attempts to keep up the good work through purely philanthropic motives, though no longer a member. This gentleman tells us that he has been overwhelmed with applications for draughtsmen within the last three months, not only from New York offices but from northern and western cities as well, and although he usually has a long waiting list upon his books, he knew of no unemployed draughtsmen to fill the vacancies for which men were wanted. In view of these facts, should the regularly organized architectural associations not take up this matter? There seems to be an opening for some enterprising man to consider the proposition from a purely business standpoint. We are confident that such an Intelligence Bureau would be a success from the outset, particularly if care were taken to keep on file an accurate record of the qualifications and salary of the applicant, and some specimens of his work.

We imagine from a lengthy conversation with the gentlemen referred to that architects in smaller cities have had even a harder time to secure assistance than has been the case with New York practitioners. We know of one recent case where an architect from Cleveland found it necessary to personally make a trip to New York in order to attempt to procure the sort of assistance he desired, and he went home unsatisfied. New York is the mecca for the draughtsmen of the entire country. They come here for experience in New York offices, anticipating a return to their respective homes when they have become sufficiently experienced to open their own offices, but during that period they cannot be tempted to leave even by offers of considerably increased salaries. Employers in other cities are also exceedingly anxious to employ men with a metropolitan experience, and such a bureau as we have suggested could keep a record of its applicants who are willing to leave New York, and in such a way be of positive advantage to all classes of the profession.



OUT-OF-THE-WAY NOOKS IN ENGLAND—COTTAGES AT BLACKPOOL. Never before published.

THE Institute of Architects announces that after January 1st, 1902, candidates for admission "not graduates of the professional schools, will be required to pass an examination similar to the examinations required for graduation in the leading architectural schools of the country," before being admitted to membership. And in view of these facts the Secretary of the national body has extended an invitation to a number of non-members of the Institute to join before this rule goes into effect.

WE notice that a number of the architectural journals have been simply astounded at the financial amounts involved in the applications made to the New York Department of Buildings in the early part of April, a condition which can be easily explained by the tremendous efforts made by the builders of speculative tenements to secure permits under the provisions of the tenement law as it existed prior to the passage of the new Tenement House Act. The amounts mentioned in these applications were undoubtedly greatly exaggerated, as they always are in speculative transactions; but as the provisions of the new law prevent the holder of the permit from delaying operations for speculative purposes, the building trades generally are bound to have an exceedingly busy season in tenements although

the tenement dweller will suffer through an over-abundance of the very class of dwelling which it is the aim of the new law to suppress.

WHEN Andrew Carnegie was planning his fine new mansion on Fifth Avenue, New York, he insisted that he wanted not a garden, but a park surrounding the structure. A garden can be produced annually, with the coming of warm weather, but a park is a matter of time and tall trees. However, the park befitting the mansion will be ready almost as quickly as a first-class garden would be. Of course, Mr. Carnegie's park will not be without its flower-beds and garden features. Trees that were five years old when planted thirty years ago are being transplanted to the Carnegie ground at Fifth Avenue and Ninetieth Street. Some of these trees are seventeen inches through the trunks and sixty feet high. One, a tall elm, has spreading branches thirty feet across. In all, twenty-eight elms, sugar-maple, poplar and silver-leaf poplar trees are being transplanted to the grounds. They are specially selected, straight and sound, and are placed rather closely together. The grove is thickest near the east wall of the ground. There will be a row of trees along the south wall, near the Ninetieth Street sidewalk. A thick clump is to be planted near the Fifth Avenue side-

walk. The entrance to the mansion requires an open space in the center of the park, between the Ninetieth Street sidewalk and the southerly facade of the building. It is to be noted that the easterly wall of the grounds is of brick and granite, fifteen feet high, and just the sort of a wall that befits a mansion like Mr. Carnegie's. It will cost \$9,000 to prepare a soil for the Carnegie park; rock rising five feet above the sidewalk level has been blasted out to a depth of five feet below the sidewalk. Porous tile is being laid about the new surface level and covered with small stones. Then loam, black and rich, will be brought from the old Fleetwood trotting park and filled in until the surface of the park is level with the street. Thus the trees and other growing things in the forest-garden will have a rich soil, well drained, to support them.

THE Pittsburgh Architectural Club, which was organized in 1896 with eight members, has had a slow but steady growth until its membership now numbers over fifty. The organization has just been granted a charter by the county court, thus giving it a standing in the community which heretofore it has lacked.

A JUDGE of the county court recently handed down a decision in a test case against the city of Pittsburgh declaring that the city ordinance providing

for the regulation of the smoke nuisance and empowering "smoke inspectors" to take action against offenders to abate the nuisance, is unconstitutional and cannot be enforced. The case will be appealed to the higher courts.

THE extraordinary building activity in the business district of Pittsburgh is working a remarkable transformation in some sections, particularly that known as "the hump," where two of the city's oldest landmarks, St. Peter's P. E. Church and St. Paul's R. C. Cathedral, are giving way to commercial structures. Fortunately, the former is being rebuilt stone for stone in a less commercial section, and the latter will likely be succeeded by a larger and grander edifice in the Bellefield district.

THE County Council of London has voted funds to buy land and build five thousand houses for the poor, to be rented at very low but remunerative rates. This is far in advance of any benevolent project undertaken by New York as a municipality. Here it would be called Socialism to transfer poor people from the slums to official residences, and yet the project is adopted by the most conservative city in the world.



OUT-OF-THE-WAY NOOKS IN ENGLAND—COCKINGTON VILLAGE. Never before published.



OUT-OF-THE-WAY NOOKS IN ENGLAND—COTTAGE AT LUSTLEIGH. Never before published.

SERVICES ON APPROVAL.

C. H. ROGERS.

WHEN the claim of an architect for payment for the preparation of a design is subject to the plans being approved and a site fixed, a serious tax is imposed on the professional man in carrying on his business, and one that no other profession is called upon to bear. If the approval of plans by a local authority be made a condition precedent of employment, a large number of the profession necessarily suffer. Any slight departure from the schedule of the Act in respect to thickness of walls, or some detail as to support of girders, might throw out a good plan. Approval of a design by the client is sometimes made a condition of acceptance, and is equally objectionable, as a cantankerous client may alter his mind a dozen times, or decide on purchasing a house or abandoning building; but approval by a local authority may depend on a point of very trivial importance from the architect's point of view. In both instances the design has to be prepared, skill expended on the plan and other drawings, and all his thought and labor are to be thrown away if at the last moment the employer changes his mind, or some technical hitch is discovered. Why should the architect's labor be estimated so low? If an employer thinks he is the best judge of a plan or elevation, why does he employ an architect when he can just as well engage a draughtsman to make a design that will exactly suit his requirements? We often ask these questions when we see clients interfering with matters that they cannot possibly understand, such as a matter of ar-

rangement, the position of windows or doors, questions of ventilation and construction, of decoration, or architectural features. What in similar circumstances would a lawyer do if his client interfered by dictating a point of law, or in altering a legal instrument, or a medical practitioner think of a patient who proposed to alter the ingredient of some prescription given to him for a certain malady? In these latter cases the client would not like to interfere with a question that would possibly involve risk or lead him into serious danger. It is because the architect's work is thought to be indefinite and uncertain—a mere question of opinion or fancy—that his patience is so wantonly tried and his knowledge underrated. It exemplifies the old adage that "familiarity breeds contempt." The business man knows everything—so he thinks—about building, and in questions of taste he thinks his own is as good as that of everybody else, if not better. Architecture is one of those matters like a man's religion or politics—a question of right judgment and of fact. Private opinion is claimed, right or wrong, based on ignorance or prejudice, and what are commonly called "common-sense" opinions are often grievously wrong in all three, because they are unaided. They are sciences about which the principles are only disclosed to a few—those who have a desire to learn and to think for themselves. As it is, the man who boasts most loudly of his common-sense judgment in these matters is he who is generally the victim of popular prejudice; his opinion on what constitutes a good building is about as mistaken as the one he forms on any political or religious question

which he has not studied. A mere dabster in building, one who has dabbled in bricks and mortar, is very hard to be convinced that his knowledge is of the crudest kind—that a house or premises that suited him would not suit others, and that what seemed to him to be good construction is wasteful and unscientific; and it is this self-satisfied individual who demands approval—that the design his architect prepares shall be subject to his opinion. The architect meets every day with men of this class, who have picked up all they know about building from a few ill-informed builders or workmen, or their information is gained from the erection of a very imperfect house or shop, and from such data they venture to discuss points of arrangement or construction, and even design. When such men once learn the depth and variety of the knowledge an ordinary architect is expected to acquire, and that opinions can only be formed on well-verified facts, and right taste can only be acquired after years spent in the studio and among art works, they will begin to see differently, and to appraise the architect's services at a reasonable standard.

Another difficulty sometimes arises when the original site cannot be obtained, and the plans of the architect are set aside in consequence. Although strictly in accordance with the instructions, the plans are rendered useless by such a change of site, and require remodelling. When the erection on a particular piece of ground is made a condition of building, a great hardship is inflicted on the designer;—his plans have been probably shaped to the ground, and would be rendered of no value in any other situation. A new set of plans must be prepared, that may involve the employment of another architect through a

change of circumstances. Possibly a change of site would entail a fresh set of directors, and they would demand the employment of their own nominees. We have also known of cases where a particular site carries with it its own architect, as when a lessor leases a plot of land on the understanding that Mr. A. is to be employed to prepare plans for the new building. The professional man who has been engaged to prepare plans resents this interference. His charge may be disputed, and it is of some importance to know how in such circumstances he stands. That he can claim for his plans, time, and labor in ordinary circumstances is, of course, reasonable, and only in those cases where the engagement has been made subject to the acquisition of a certain site can there be any doubt or dispute. Competition has seriously underrated the architect's services by tying him down to certain requirements; but the architect is not compelled to respond to conditions that are sometimes impossible, or accept terms of payment that are frequently insulting to his profession. The general tone of the building owner or committee is, "Obtain plans from architects, and only pay for the design that is approved or passes the local requirements"; in other words, the architect is to give his services for nothing unless he guarantees the approval of the plans by his employers and self-constituted judges. He must guarantee his work just as a contractor has to guarantee to carry out his work at a certain sum. All this is very degrading to the profession. Unfortunately, the pressure of competition drives men to submit to the ordeal. This conditional way of receiving emolument by the professional artist is unhappily not rare. In a few of the large public competitions the better and more professional



OUT-OF-THE-WAY NOOKS IN ENGLAND—COTTAGE AT COCKINGTON. Never before published.



RESIDENCE, SAM'L B. SEXTON, HYDE PARK, N. Y. York & Sawyer, Architects.

course has been adopted of inviting a few architects of note to submit designs, and paying each a handsome honorarium for their thought and labor, in addition to the author whose design is selected to be carried out at the usual percentage. Those who submit designs on approval, or guarantee that their plans shall pass any ordeal, are placing their services and talents at a disadvantage, and practically giving away their services, and seriously underrating their professional skill.

HAS ARCHITECTURE GONE MAD IN GERMANY?

JOHN C. PAGET.

THE determination of the new school of architects in Germany to turn their backs upon all the good work done in past ages and strike out a new line of advance for themselves is producing results so extraordinary as to call for some words of protest. All architectural art until the Renaissance grew gradually, and each fresh step in its progress was taken in answer to some demand, usually constructive, and met some want. The Renaissance for a time seemed to break through this, for it was a revival of earlier forms; but its finest examples of building are based upon the great principles of the art. They must be judged by the same standard as their predecessors; they are successful or not in so far as they conform to taste, proportion, and fitness. From the Renaissance we date our domestic and most of our civil architecture, and in each of the principal European countries a national style arose at that period, England retaining much Gothic detail, or detail derived from Gothic; France exhibiting bold and often beautiful roof treatment; Germany displaying great freedom and profusion in ornament; Italy working more or less upon the fact that the Renaissance was a revival of her national building forms. Of all these the architecture of Germany

was the one least strained by great underlying principles; it produced many buildings to which we apply such words as quaint, charming or picturesque, but open to criticism in that the quaint and the picturesque seem to constitute the style and there is little else.

When our latter-day rebuilding period commenced in Germany, and cities began to be laid out upon modern plans, there were two systems contending for the mastery—one the Italian, derived from classic sources, the other the picturesque, or Old German. The latter won the day in the end, and the result is the confused architecture of modern Germany, tormented with too many curves and too many finials, too much roof and too much breaking-up of the roof, and a general restlessness and striving after effect. In all these, however, there was some sort of governing idea: it was at least supposed to be the German Renaissance. Quite recently, however, a new departure has been taken and all convention cast aside; a new style is to be created; taste, dignity, and proportion are sneered at as old-fashioned; new forms are being adopted, mostly ugly and meaningless; the grotesque is everywhere, and decoration has gone mad. Interiors are deluged with curves and unintelligible, useless features; all ordinary details of house-building are altered out of recognition. It would seem as if German architecture were about to be lost altogether, so violent is the change, so extraordinary the result: the revolution extends to the minutest details, and has worked havoc not only with roofs and dormers, cupolas and gables, but amongst tables and sideboards, armchairs and stoves. A perfect mania for the grotesque has seized upon designers; you must never restrain a fancy or an idea on pain of being dubbed old-fashioned, hide-bound and conventional. Where any sort of analysis is possible of these frantic creations, we find that the new style—or, rather, the new practice—consists of taking details from everywhere,

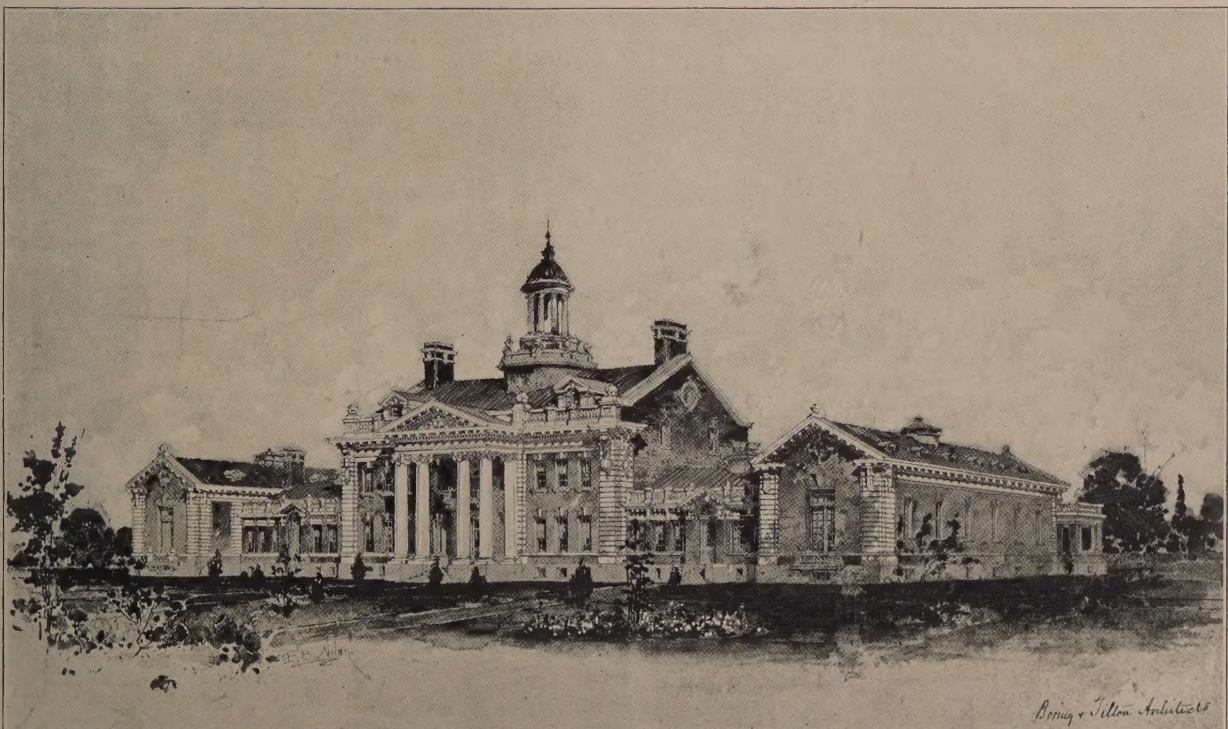
exaggerating them, distorting them, and flinging them in a shower upon a single design.

The step-gable—a familiar but not very satisfactory feature all over the North of Europe—has grown gigantic, and is made more conspicuous by long, narrow, vertical panels under each step, ornamented (so the designer probably imagined) by lines resembling rude tracery. Towers show external staircases and a profusion of little curved buttresses; they are terminated by cupolas of amazing ugliness. Many of the worst features of older German buildings, especially those that are quite useless, are reproduced and exaggerated; the curiously curved pediments often seen over windows reappear with additional curves: the windows themselves are treated so as to bewilder the spectator.

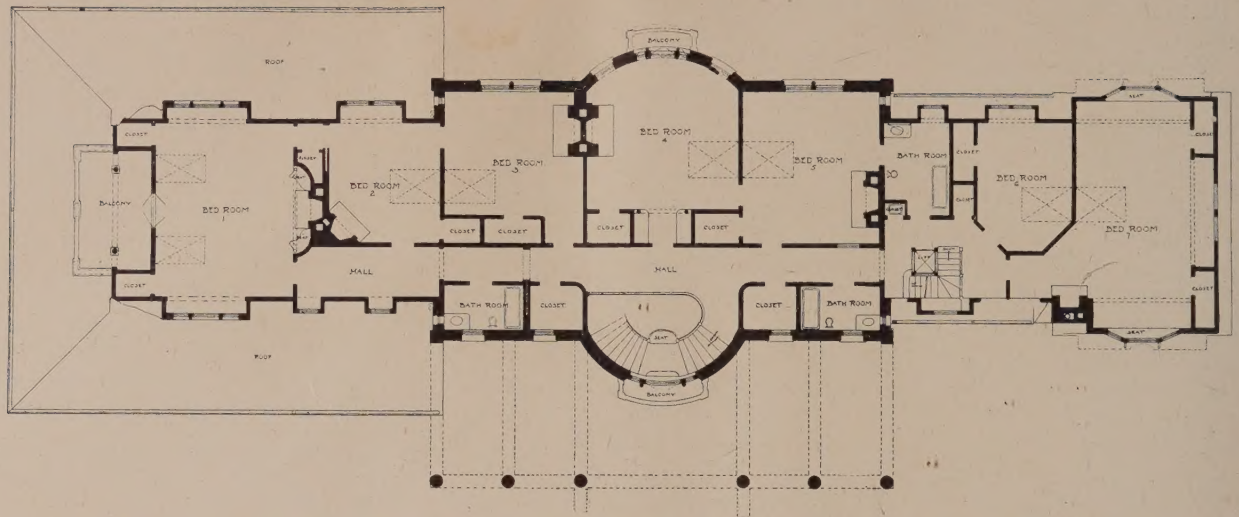
If some of these exteriors seem at a little distance to retain some of the forms usually associated with what we call a building, their interiors suggest a nightmare. One characteristic is common to them all: they are full of strange curves, often introduced without rhyme or reason. Another is a curious kind of openwork in wood forming perfectly needless brackets under beams and lintels; it is applied with reckless exuberance to screens and partitions; the curves growing wilder as they ascend, reappear on the frieze and expire on the ceiling, where a large spider dipped in ink could produce a better effect if allowed complete freedom.

The oddities are in some cases derived from Japan, and exhibit the hopelessness of attempting to transplant the peculiar and characteristic forms of the Far East to Europe. We are speaking of forms only, of details transplanted without rhyme or reason from one climate and surroundings to another. Where there is no violent

change in climate, building materials, or the habits of the nation, it is possible sometimes for a race of conquerors to bring their architecture with them bodily and impose it upon the conquered, as the Moors did in Southern Spain. But in such cases the details have generally been modified, and at last the style itself, by new surroundings, and we cannot but admire the exquisite skill with which forms and materials have been adapted, often resulting in an artistic compromise. So, again, an almost exact copy, though perhaps on a reduced scale, of a foreign building has been made as a plaything, a palace of pleasure, or a hunting-box for a sovereign of profuse taste. But the present phase of German building and decoration has nothing in common with these; it is an arbitrary caprice, a discordant medley, a reckless defiance flung in the face of the public by men who know how weak the mind of the multitude is, how few ever judge for themselves or will express their judgment. There can be little doubt that, unless very carefully watched and restrained, the mania for absolutely novel forms, for daring but useless experiments, will spread very rapidly over Europe; already we have seen the Castel Bérenger in Paris, whilst a host of small novelties are appearing in the work of the enterprising builder in England. In England, however, and in France a protest will be made against fantastic novelties meeting no want and working out no legitimate development; will a word be spoken in time in Germany? The truth is that Germany is in greater danger from this movement than her neighbors, for the picturesque is already the ruling idea in her civil and domestic buildings, which require order and repression above all things; license has been carried far enough. She owes it to herself at once to rescue her architecture from the slough



COMPETITIVE DRAWING, GOVERNMENT HOSPITAL FOR THE INSANE. Boring & Tilton, Architects, New York.



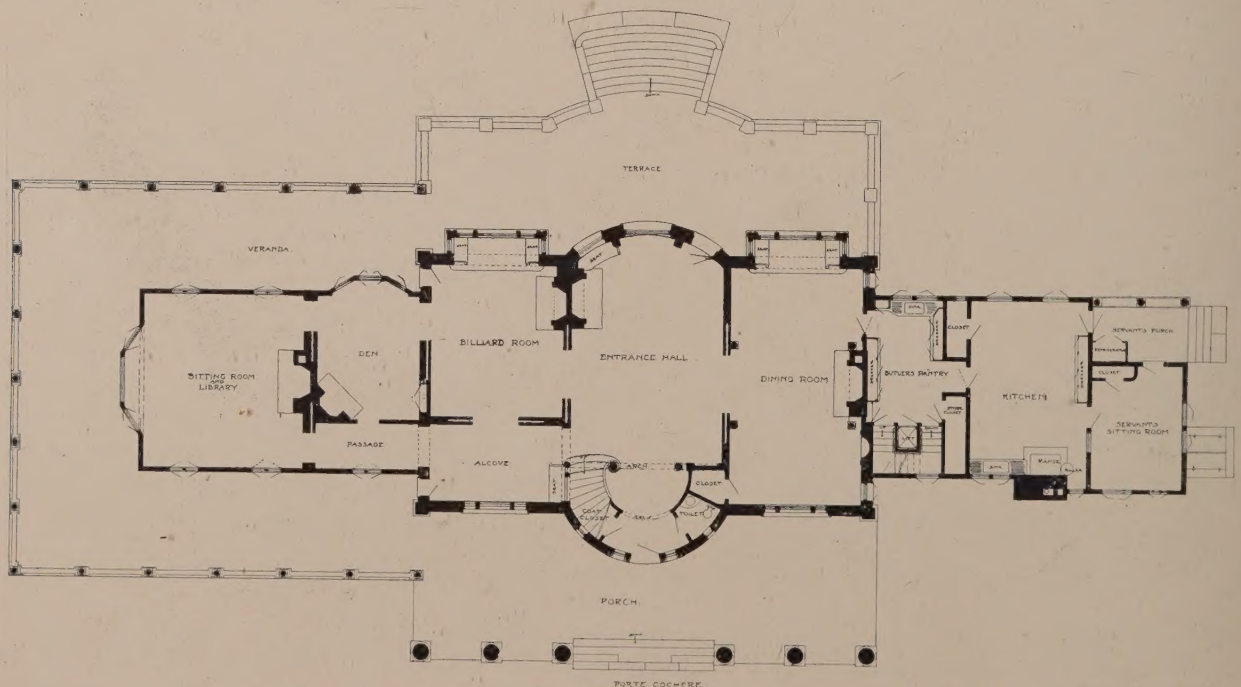
SECOND FLOOR PLAN, COUNTRY HOUSE, L. J. BUSBY, GLEN COVE, L. I. C. P. H. Gilbert, Architect.

of eccentricity and exaggeration into which it appears to be falling. For this same eccentricity is developed not only in her architecture: it breaks out in the furniture, the fitments, wall-papers, domestic utensils; in fact, it permeates and paralyses the whole range of artistic design. The maddening ingenuity of form and outline in German design is absolutely bewildering. It is genius, but genius working on wrong lines. And the fact that genius is being wasted on meretricious and inartistic work must cause a pang in the heart of every conscientious architect and art-worker. It is almost an axiom that countries distinguished for their commercial abilities or military renown rarely give birth to great artists. Possibly Germany's system of military service has much to answer for.

DIFFICULTIES OF PRACTICE.

C. H. DAY.

SEVERAL difficulties confront the younger men who enter the profession, and these increase rather than diminish year after year. We propose to take a few of them. Those who have emerged from their office pupilage, or have successfully passed the examinations provided for them, sometimes will find it hard to reconcile what they have learned with practical building experience. They see, to their chagrin and dismay, men of no education, untaught in the mysteries of the architectural craft, ignorant of art and the principles of science, engaged in building, superintending buildings, acting as clerks of works, and even practicing as architects. Such experience comes as a surprise and a shock to the young architect



FIRST FLOOR PLAN, COUNTRY HOUSE, L. J. BUSBY, GLEN COVE, L. I. C. P. H. Gilbert, Architect.



Wurts, Photo.

COUNTRY HOUSE, L. J. BUSHY, GLEN COVE, L. I.

C. P. H. Gilbert, Architect.



Wurts, Photo.

STABLE, L. J. BUSBY, GLEN COVE, L. I.

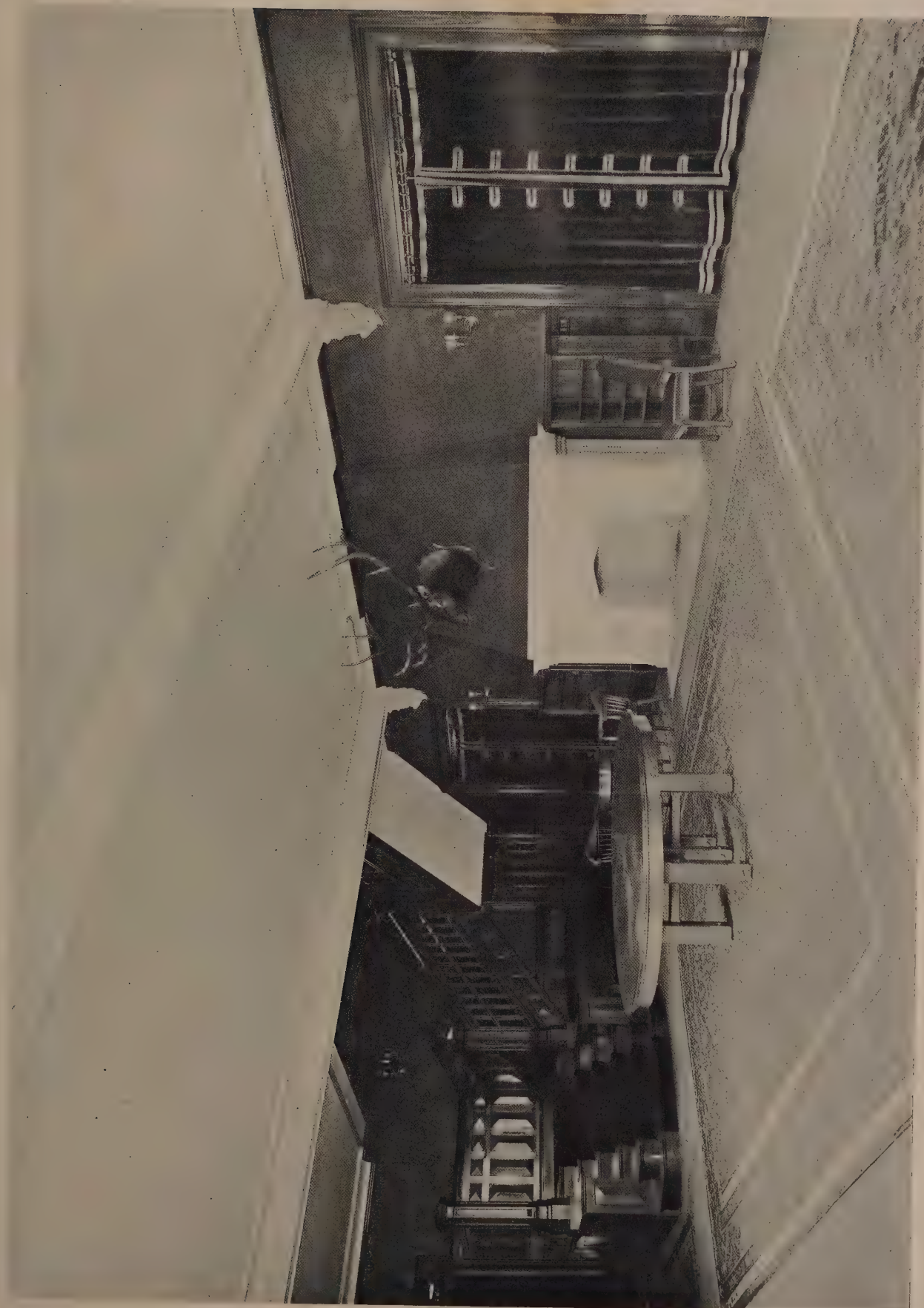
C. P. H. Gilbert, Architect.



DINING ROOM, RESIDENCE, ALFRED F. MOORE, PHILADELPHIA, PA.



HALL, YORK COUNTRY CLUB, YORK, PA.



Parish & Schroeder, Architects.

HALL, DODGE MEMORIAL, PRINCETON, N. J.

Wurts, Photo.



DODGE MEMORIAL, PRINCETON, N. J.

Parish & Schroeder, Architects.

Wurts, Photo.

who has honorably acquitted himself before his examiners. That a builder's clerk, or one who has worked at the bench, should be able to undertake any building, even to prepare plans and elevations of houses and shops and factories, sends a pang of disappointment through many a young architect who has up till then dreamed that only special training could alone prepare one for the task. And what is quite as hard to bear is that the young craftsman or builder's clerk comes equipped with a kind of rough-and-ready knowledge, with physical strength and endurance, agility in climbing scaffolding, that the young, inexperienced architect does not profess. It is this special equipment in building operations that presents so great a difficulty at the very beginning; it can only be learned on the building and in the workshops, in contact with the workmen themselves. The inexperienced architect finds it impossible to bounce his way upon the building; he tries his best to intimidate or cajole the contractor by declaring his authority, or referring to the specification and contract, as credentials of his position; but this plan he soon finds impracticable when he discovers that the

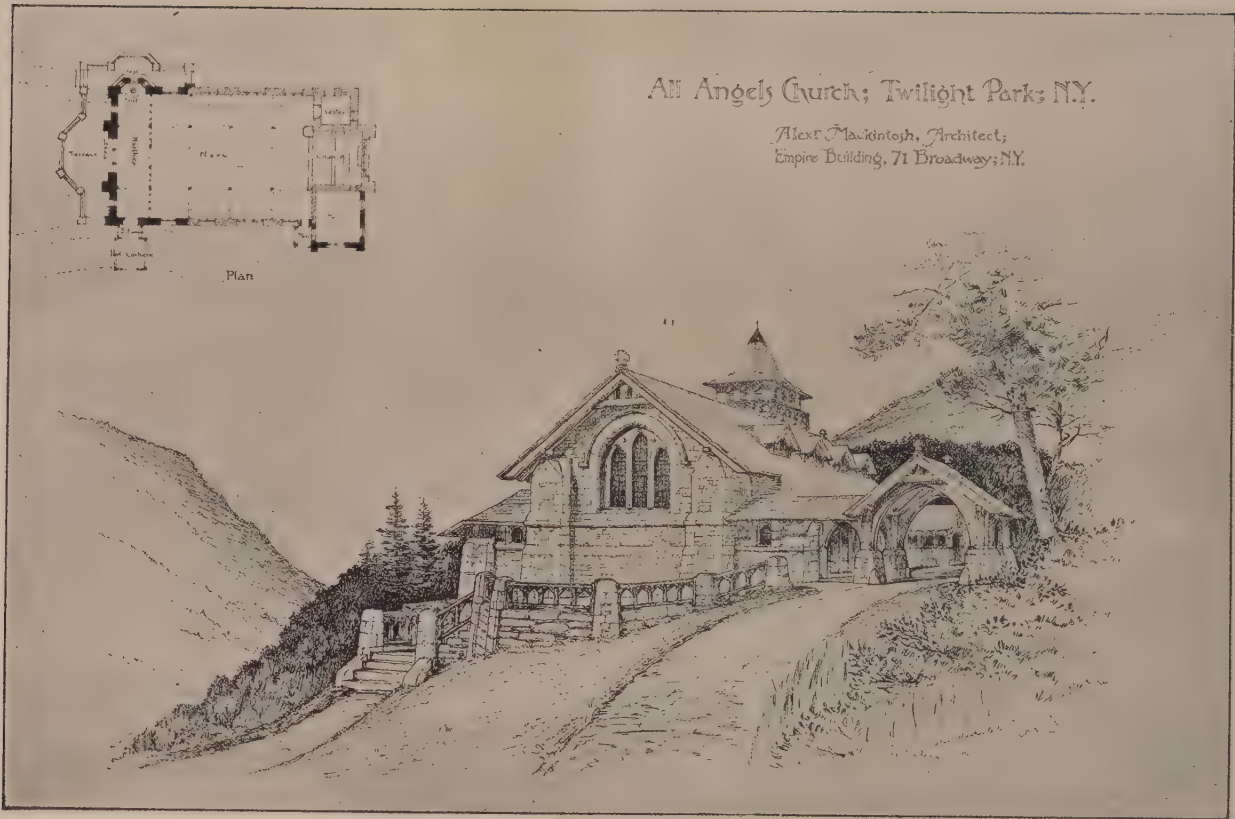
builder's foreman knows just a little something that has not occurred to him—some other way of doing the work that practical conditions have rendered necessary. It is a little mortifying to be told that the depths of footings specified cannot be adhered to; that lime concrete is just as good as Portland cement concrete in certain positions; that the bricks specified to be used are not the best for internal plastered surfaces. In all trades there are certain "wrinkles" that can only be learned from experience. One difficulty is met in not realizing the prac-

tical conditions of building materials, and this is where the rough-and-ready knowledge of the practical builder or foreman comes into conflict with the architect's theoretical knowledge. Few have to suffer more from disillusionment than the architect when brought into practical contact with building materials. His knowledge of the properties of clays, the proportions required in a good brick earth of silica and alumina, and the percentage of lime or other flux to fuse these ingredients, or how much oxide of iron or magnesia is necessary to give

it color may be sound, but it does not stand him in good stead when confronted with a load of bricks delivered for use. His textbook knowledge of brick earths, distinguishing between pure or strong clay, sandy or loamy clay, marls and limy clays, avails him little when he comes to examine a quantity of bricks, and his only guarantee is to apply those simple physical tests which the practical architect adopts, such as striking the brick with a mallet, trying its absorbent properties, and seeing that it is true in shape, is well burnt, and free from lumps of lime. The formula that the bricks should be

"hard, well burnt, square and regular in shape," comprises all that the practical man troubles himself to know. So with the many varieties in the market. The textbook will hardly inform the young architect of the differences between machine-made and hand-made bricks, or between the qualities known as "slop" or "sand-moulded." We do not undervalue the instruction given in our building science classes, if we inquire how many of those who pass know the difference between "clamp" and "kiln"-burnt bricks when they see them. Again, there are parts in





walls and foundations where even "burrs" and "chuffs" can be used. In the composition of mortar, how few architects are able to test such matters as the freshness of the lime or its slaking, or the prescribed proportions, or whether the sand is of the right sort, clean and free from salt, or that the specified cement tests are carried out. All these matters, of practical importance, are troublesome to the architect, and he is content to leave them to the clerk of works. Then the younger men in the profession experience a difficulty in comparing their textbook descriptions of building stones with the actual material. The rough-hewn blocks of stone as they are delivered in the mason's yard defy the critical capacity of the theorist; only the builder or clerk of works can determine the nature and quality of the stone and its quarry bed. Timber presents the same difficulty of detection, and only those who know the secrets of the trade, the marks or brands of shippers, have any guarantee of the qualities. Books on timber, which describe the timber imported from Russia, Sweden, Prussia, or other countries, do not help the young architect in discovering the several qualities, and leave him pretty much in the dark, except that he is safe in rejecting the sapwood, large, loose or dead knots and unseasoned timber. And so it is with all other materials; the chief obstacles to encounter are the conventions of the market and the manufacturer, which make the application of principle knowledge so hard to learn outside the yard or factory. The forms or shapes which timber, stone, slate, iron and other materials assume in the market, offer a special difficulty to the office or class-trained architect. What he has been taught by books or

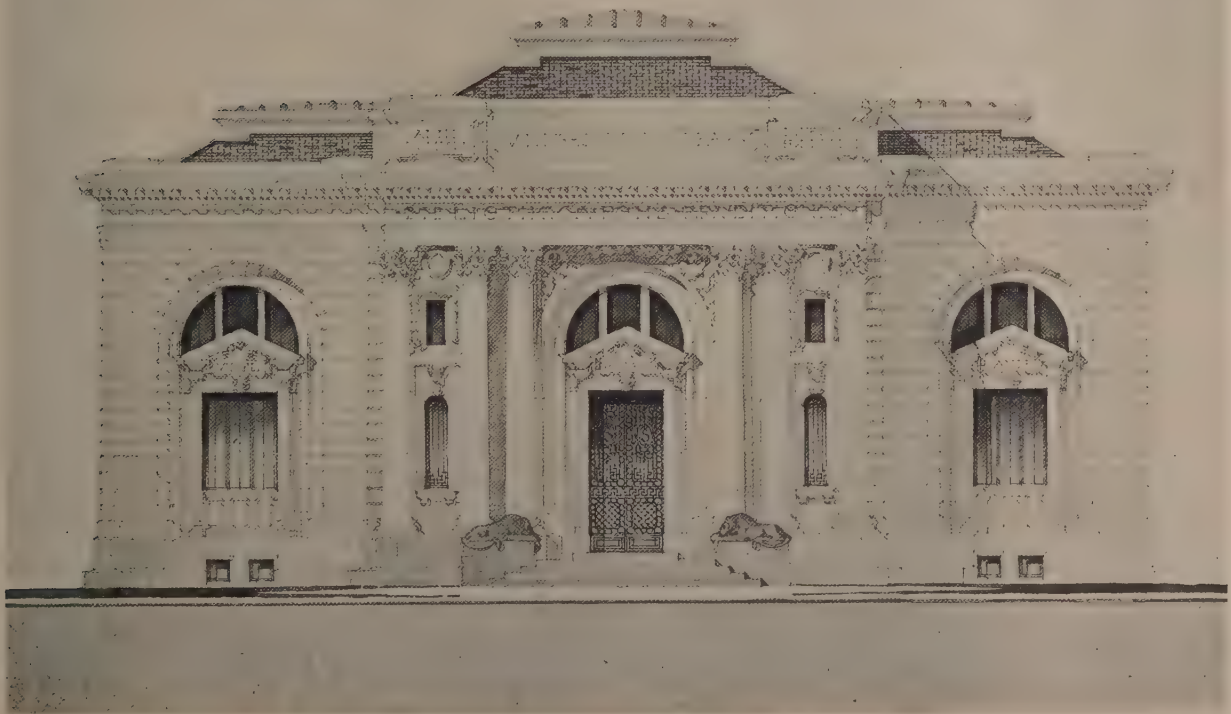
from specimens in class-rooms misleads him as to the size, weight, form and appearance of materials. The builder's clerk or the youth that has been trained among workmen in the various shops or on the building in progress quickly obtains all this extraneous and practical information, and he therefore can apply his knowledge with less trouble. The architect's pupil, on the other hand, has to convert his knowledge into actual facts, and this translation of class-teaching and textbook into the actual building is troublesome. We have dealt at some length with this difficulty of converting acquired theoretical knowledge about materials into concrete facts, because it lies at the root of the separation of our art from building. Architecture or building as an art has to be translated into building as a trade. Some years are required of the young architect's life to enable him to apply effectively what he has learned; that will enable him to dispense with much of the *ipse dixit* of mere theory, to translate his theory into facts. When he can fall back on theory to justify his practice, or *vice-versa*, and can call to his assistance both his scientific knowledge and his experience, he is in a happy condition; till then he has to pick up his practical knowledge slowly, but surely.

The discrepancies that often occur between the drawings of the architect and the actual execution display another phase of the question we are considering. In these discrepancies the young practitioner finds much to make him anxious and impatient at times. His very complete and perfect set of drawings for contract work, which have taken him weeks to prepare, and cost much thought, are here and there found wanting. At the

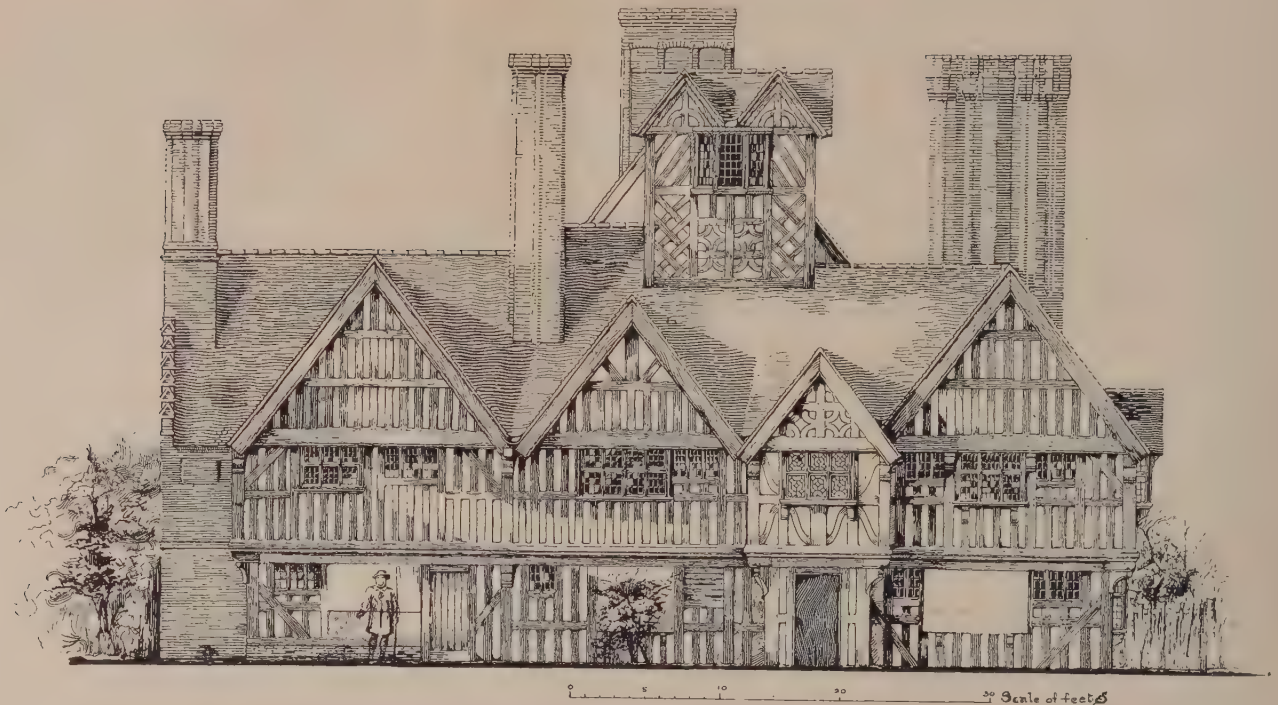
very beginning of the building the foundations obviously require to go deeper and to be spread more—matters that were unsuspected till the trenches were dug; the quantities provide considerably less brickwork than is shown in the plans; additional piers in cement have to be built to carry girders; or some of the masonry cannot be worked as shown. In the carpenter and joiner's work many of the details are discovered to be imperfect: the dimensions do not agree with those of the actual building, and many changes have to be made. Or the carpenter or joiner cannot work to them as shown, owing to some technical error in design. These are things that occur every day to the younger men in the profession, and they indicate the wide gulf that separates the drawing-office from the workshop. Their most elaborate drawing of details, on which much time and thought has been expended, turns out to be worthless, owing to some error of judgment—a useless waste of material in not consulting the building. Detail drawings are made from imperfect data, or hurriedly from the general drawings, instead of being devised from consultation with the real building or workmen. It is a desirable plan in contract work to have all the principal details out before the contract is signed; but the plan is not the best or most fortunate for the inexperienced architect, who cannot be expected to know the workman's way of looking at things. Therefore, it is a safer course to prepare some details—such as those of stonework, of wood, or ironwork—when their

connection with the building or other materials can be realized or more clearly seen by reference to dimensions or ascertained facts. The details prepared are not always to the builder's liking. They prefer wood cornices for joinery that are made up of moulded thicknesses to solid-run pieces, "planted" to "stuck" mouldings. In stone cornices the same objection to solid-worked stones is often made on the score of waste. These technical objections are troublesome to the designer who has tried to give a solid and substantial effect to his detail. The experienced architect knows how hard it is to induce the contractor to look at the work from an artist's point of view, and he will discover the hopelessness of the task when any detail of unusual design or shape is presented to him to carry out. Repeated evasions of the architect's intention are made when it is too late to alter. The builders' excuse is that he could not work the material as shown; that the mode of construction would be impracticable, and so on. Perhaps there is sometimes a little to blame on the architect's part—the love of affectation to do something original, or to sacrifice everything to a hobby or a piece of empty cleverness. But the discrepancy discovered by the builder between the drawing and specifications or quantities is a constant trouble to the inexperienced;—it means compromise—the architect must yield to the quantities, or the latter to the design.

To the artistically sensitive man the requirements of such matters as plumbing, sanitary fittings, ventilation,



PUBLIC LIBRARY, SAN DIEGO, CAL. Ackerman & Ross, Architects.



OAK HOUSE, STAFFORDSHIRE, ENGLAND. Measured and drawn by Eden Smith, Toronto, Canada.

heating, &c., give much trouble; but to others of the perfunctory order of mind they are matters indifferent. To the former these details of building are looked upon as points that may mar the design if left to tradesmen who are careless about the matter. Great care is necessary in drawing up separate contracts with manufacturers and engineers if the character of the buildings is not to be spoiled by clumsy makeshifts, unsightly cowl, awkward arrangements for pipes or coil-cases. It is necessary to keep these details in the architect's hands, otherwise they are often overlooked, and the general contractor is hardly to be blamed if he goes to the cheapest market, or refuses to pay for a class of workmanship not particularly specified. When sub-contractors are employed, there will be friction unless they enter into a contract with the general contractor guaranteeing a due performance of the work, and indemnifying the latter against any damage or any claims made against him.

We live in an age of specialities. Year by year the inventions and applications in reference to buildings increase; till at the present time the number of building fittings and specialties is beyond the reasonable acquirement of the architect—that is to say, he cannot know them all sufficiently to decide on their merits. He specifies a new window fastening, a new sanitary apparatus, or a new decorative material, because it answers his purpose. Each may be good in its way, yet he is exercising a degree of responsibility that may be rash. His client is anxious to have the best. In these days the selection of a manufactured article for either use or decoration has become a professional duty of much responsibility, and one demanding a considerable acquaintance with modern invention, as well as knowledge of the craft. In selecting an article the architect has, in justice, to consider not

only what is the best, but that which fulfills the mission of art. There are a lot of good things and a lot of rubbish that can only be separated by a technical knowledge of the trades and a clear insight into what is wanted.

THE OTHER SIDE.

Editor of Architecture:

SIR:—Allusion has been made in your columns to the scant courtesy sometimes shown by architects towards men who call at their offices to present the merits of devices or goods which they desire the architect to adopt in his specifications. While there may be just cause for complaint in many instances, yet those architects who extend proper courtesy have frequently just cause for complaint against the manufacturers of special devices because many of them seem to think that after they have induced the architect to specify their goods all responsibility on their part ceases with the delivery of the goods. Let me illustrate:

1. The receipt of a number of circulars, followed by a personal visit of the manufacturer's representative, induced me to specify a certain overhead pulley. The pulleys were duly delivered to the mill which furnished the frames, set in them and built in the building, the walls of which were of brick. No special directions accompanied them. When the time came for hanging the sashes the carpenter was ingenious enough to devise a "mouse," consisting of shot placed in a spiral spring, which being forced up over the pulley passed down on the other side, of its own weight, and drew the sash cord after it. Here another difficulty occurred, for it was found that the projecting mortar joints interfered with the free passage of the sash cord on the side of

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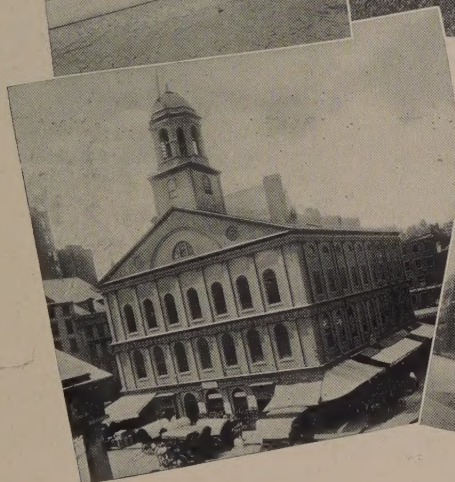
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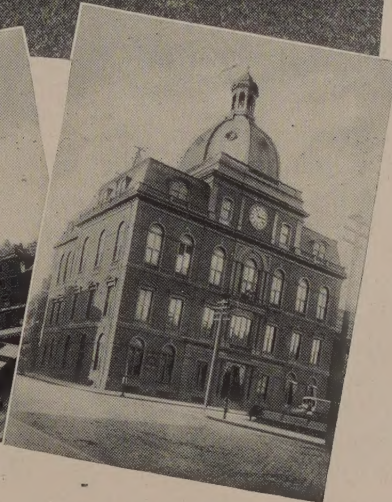
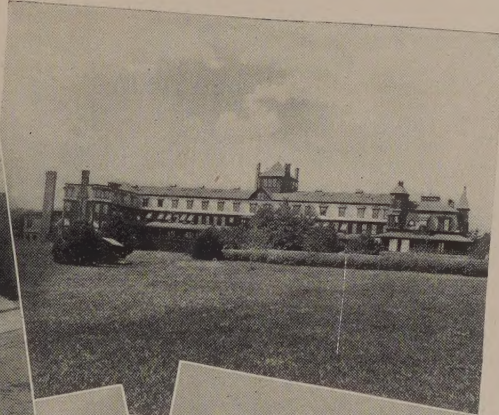
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the pulley next to the brick work, to remedy which entailed considerable expense on the contractor.

2. In a similar manner I was persuaded to specify an "accordion" ball-bearing hanger for the sliding doors dividing a Sunday school room. One of the claims made by the manufacturer was that it was especially adapted to large openings, the doors folding back against the wall and allowing virtually the full width of the room to be thrown open. When the doors were hung the hangers did not work properly. They seemed to catch on the track and when, after some exertion, they were started, they went with a force that was dangerous to those working them. When the manufacturer's attention was called to this he said the hangers were not heavy enough for the doors, and that he could do nothing. No instructions were furnished with them stating the limit of height, width or weight of door to which they were applicable and, though the carpenter went to considerable expense in attempting a remedy, the doors have been a source of annoyance and dissatisfaction ever since.

3. In similar manner stable fixtures of a well-known manufacturer were specified. With the delivery of the goods no directions were furnished as to how far from the wall to set the stall posts and gutters, relatively, level or thickness of floor, height of partitions to underside of guard rail, etc., which failure caused considerable trouble and expense to the contractor. The manufacturer met the architect's complaint with the hackneyed answer that he had been "furnishing these fixtures for many years, and never before had any trouble with them."

In each of these instances the architect had to stand the brunt of complaints. The goods may have been all that they were represented to be; but if the manufacturer had spent half the time and energy that he used in advertising and sending agents to persuade me that his device or goods merited my approval, in furnishing the necessary directions to insure their proper working, the difficulty in each case might have been avoided and his goods specified again instead of being discarded.

If the experience of other architects has been similar it is not surprising that they do not seem anxious to

extend the courtesy of their offices to manufacturers of special devices.

Very truly yours,

ALBERT E. DAVIS,

Borough of the Bronx, N. Y., April, 10, 1901.

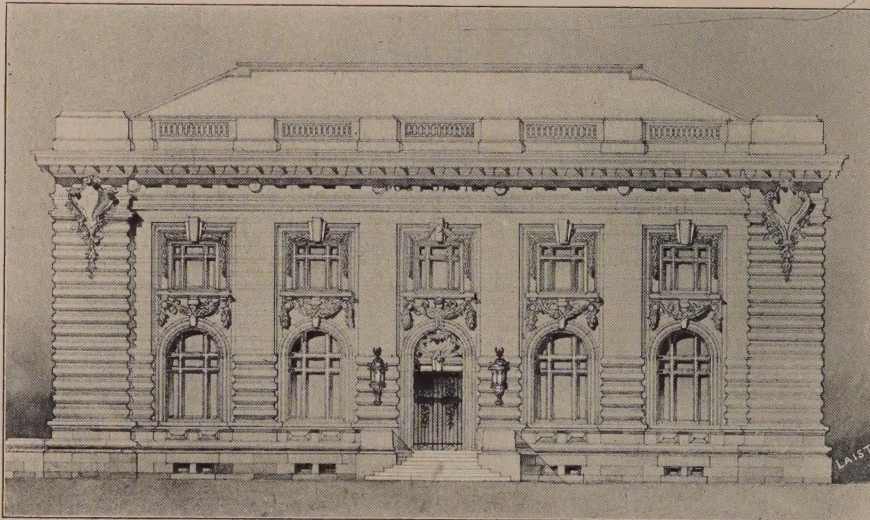


READY-MIXED PAINTS IN ARCHITECTURE.

PROBABLY few architects realize the expense incurred by property owners in paying men to do work that can be done by machinery. The mixing of paints with oil, driers, and tinting colors is one of those things which nothing but machinery can accomplish satisfactorily; yet it seems to be accepted as a fact that hand-mixing is natural and acceptable.

A man, by hand, simply cannot produce uniform distribution either of oil or color through a mass of paint, and this means that he cannot prepare uniformly wearing material. If he could his time would be too costly for the purpose.

The logical material and the only logical material is ready-mixed paint—that is ready-mixed paint containing legitimate paint materials, zinc white, white lead, in-



POST OFFICE, ALTOONA, PA. James Knox Taylor, Supervising Architect.

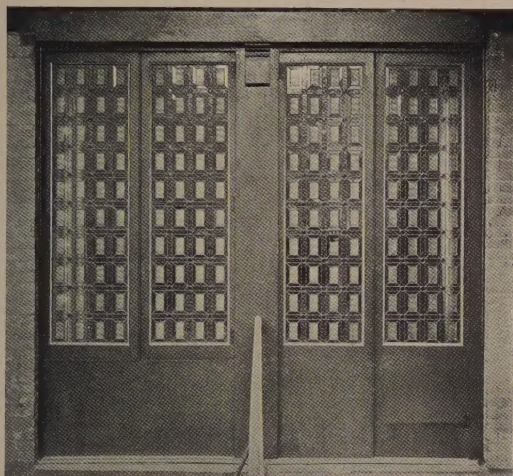
ert pigments if required, pure linseed oil, turpentine (or benzine) and driers. Such paints, if unevenly mixed by hand may not yield the best obtainable results, but if ground together and mixed by machinery, they will surpass straight lead or any other hand-mixed paint it is possible to produce.

In such paint the zinc preserves the color, the oil absorption and durability; the lead obscuring capacity and ease of working; the oil the weather-resisting elastic varnish, and the other ingredients, in the one case extension, in the other, drying qualities.

There are such paints on the market (there are more cheap mixtures of water and benzine, of course, but we can avoid them), and the wonder is that architects do not more frequently take advantage of their undoubted value and economy.

CHARLES JOURDAIN.

LUXFER PRISMS

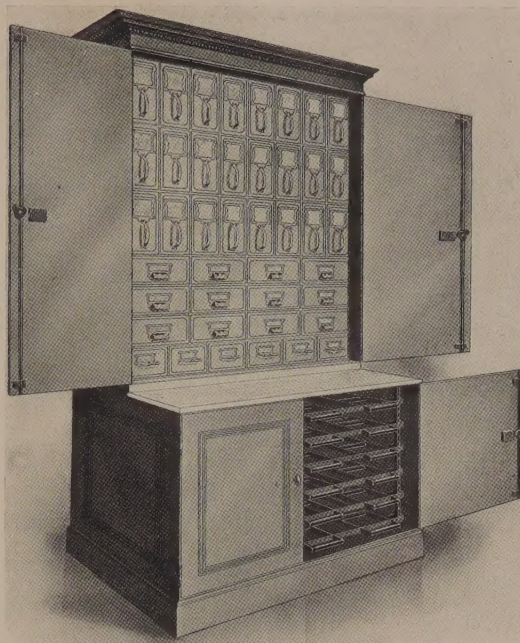


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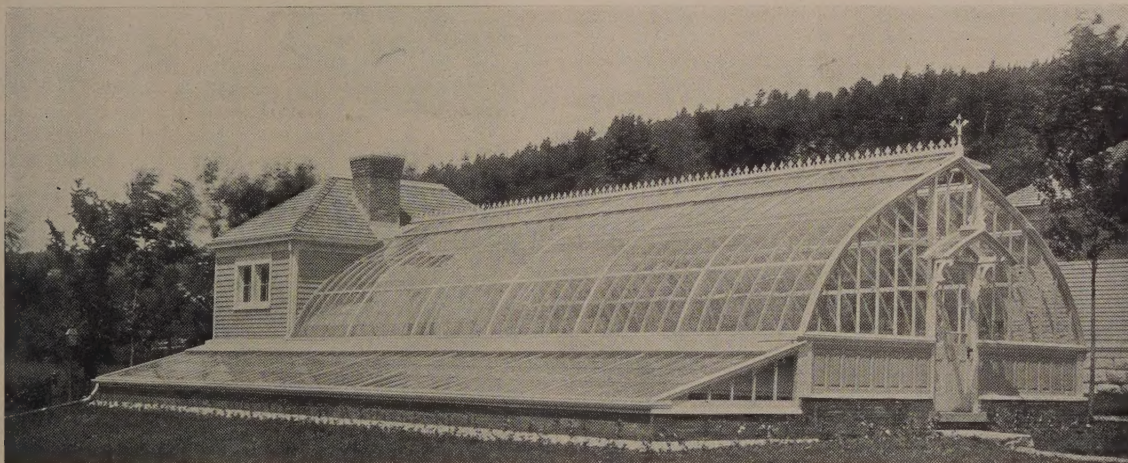
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ON ACCOUNT of the recent fire in the building of the American Fine Arts Society, during which the League rooms were considerably damaged by water, the annual meeting was held on Tuesday, May 7th, at the Arts Club in West 34th St.

President Gibson presided, and after opening the meeting called for the annual report of the Executive Committee. This report showed that the League had made a gain in membership during the year, and the Treasury showed an exceedingly satisfactory balance.

On account of the difficulties with the customs authorities the Committee recommended a discontinuance of the exhibition of drawings sent upon the circuit of the Architectural League of America, particularly in view of the fact that the standing of the League's exhibition had now reached such a stage that more available material was sent in from other sources than could be properly handled by the Exhibition's committee.

The Committee deplored the decreased interest shown from year to year in the League's Medal competition, and recommended that the Committee on Competitions and Awards attempt to arouse more interest by issuing the programme earlier in the year than had been the custom in the past.

President Gibson stated that the fire in the Fine Arts Building had not reached the League's rooms, the damage having been entirely by water. All of the movable property of the League, including the Library, had been carefully protected by the Salvage Corps of the Fire Department, so that the repairs which would be necessary in order to make the League's quarters habitable would simply consist in redecorating, the cost of which would be covered by the Fine Arts Society. During this informal report it developed that the valuable library of the League was not separately covered by insurance, and a motion being made to that effect, action to this end was recommended to the Executive Committee.

The balloting having been carried on during the dinner, and the reading of the reports, the tellers then announced the election of the following ticket:

President, H. J. Hardenbergh.

First Vice-President, C. Y. Turner.

Second Vice-President, Thomas Shields Clarke.

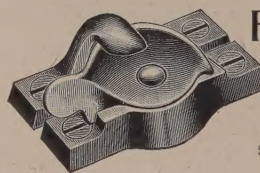
Executive Committee (Class of 1904)—Francis C. Jones, J. Langdon Schroeder, William B. Tuthill.

Delegate and Alternate (To the Fine Arts Federation)—R. W. Gibson, W. E. Stone.

In the absence of the new President and First Vice-President, Mr. Thomas Shields Clark then took the chair and the usual motions were carried, thanking the retiring officers and committees for their services.



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